

RMC/DGM

Jt.GM/QA RIG Office

Dt.03.07.19

No.7208/QAML/VQR/2019-20

Sub: Vendor Qualification Criteria required for Castings – reg

Ref: 1. DGM/QA(A) & QMS letter No.07271/QMSC/VRC/VQC/2019, Dt.02.03.2019

2. DGM/RMC letter No.6415/TA(C&S)/CASTING/2019-20

With reference to above Vendor Qualification Criteria required for 4 types of castings is furnished below.

Sl. No	Short description	Wt. of the Castings	Length	Width	Essential Core competency (All supporting document proof to be submitted)	In house or Tie up required (Tie up document proof is to be submitted)	Remarks
1a	Sand Castings/ Any type of steel castings	0 – 755kg	Up to 1408mm approx	Up to 550 mm approx	Melting: Medium frequency Induction furnace/Arc furnace [Melting capacity: i)each casting wt. <50kg: minimum 0.5MT furnace, ii) each casting wt. 50-500kg: 1.0MT furnace, iii) each casting wt. >500kg: minimum 1.5MT furnace], Moulding: Jolting & Squeezing machine(for Green sand moulding)/Hand moulding Co2 moulding (Phynalic/Sodium silicate), 2part/3part Resign system, Manual/Continuous Sand mixer, Core shop: Shell core shooter/Cold box/ Hot box/ Co2 core resign facility Sand testing facilities: GCS, Moisture, Permeability, Mould hardness, Core hardness Chemical Test facility: Spectrometer, Dimensional Checking: 2D measuring instruments and gauges. Temperature checking: Suitable Pyrometer Shot blasting	Pattern making, Heat treatment, Mechanical test facility, Dimensional Checking: 3D CMM Machine.	
2	Investment casting	0 -3.5kg	Up to 300 mm approx	Up to 250 mm approx	Melting: Medium frequency Induction furnace, Melting capacity: minimum 100kg furnace Investment casting facility: Wax coating, Injection moulding, Sand mixer, Core shop: Shell core shop/Cold box/ Hot box/ Co2 core resign facility Sand testing facilities: Moisture, Permeability, Mould hardness, Core hardness Chemical Test facility: Spectrometer, Dimensional Checking: 2D measuring instruments and gauges. Temperature checking: Suitable Pyrometer Abrasive blasting	Pattern making, Heat treatment, Mechanical test facility, Dimensional Checking: 3D CMM Machine.	
3	Non Ferrous Casting	0 -3.5kg	Up to 450 mm approx	Up to 250 mm approx	Melting: Medium frequency Induction furnace/ Skelnar/Hearth/Reverboratory Heat resistance type furnace with Silicon Carbide tubes/Heating elements [Melting capacity: minimum 0.5MT furnace] Moulding: Hand moulding/Co2 moulding (Phynalic/Sodium silicate), 2part/3part Resign system, Metal moulds (Die casting): Gravity Die casting/Pressure die casting/Low pressure die casting De-gassing equipment: Roraty De-gasser Manual/Continuous Sand mixer, Core shop: Machine/Manual making Sand testing facilities: GCS, Moisture, Permeability, Mould hardness, Core hardness Chemical Test facility: Spectrometer/ Ferro Lab for Carbon and Silicon analysis Dimensional Checking: 2D measuring instruments and gauges. Temperature checking: Suitable Pyrometer Abrasive blasting/ Shot blasting	Pattern making, Heat treatment, Mechanical test facility, Dimensional Checking: 3D CMM Machine.	

4	Grey Iron casting	0 - 12Kg	Up to 250 mm approx	Up to 200 mm approx	<p>Melting: Medium frequency induction furnace/Arc furnace [Melting capacity: minimum 0.5MT furnace Moulding: Jolting & Squeezing machine/Co2 moulding, Sand mixer, Core shop: Shell core shop/Cold box/ Hot box/ Co2 core resin facility Sand testing facilities: GCS, Moisture, Permeability, Mould hardness, Core hardness Chemical Test facility: Spectrometer/ Ferro Lab for Carbon and Silicon analysis Dimensional Checking: 2D measuring instruments and gauges. Temperature checking: Suitable Pyrometer Abrasive blasting/ Shot blasting</p>	<p>Pattern making, Heat treatment, Mechanical test facility, Dimensional Checking: 3D CMM Machine.</p>
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M.GOPI PILLAI
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ASM/P



ASM/PC



ASM/OA



ASM/MA